SECTION 1. SCOPE AND OVERVIEW

1.1   Scope

These Implementation Procedures provide installation instructions for the Global Command and Control System (GCCS) Version 2.2. These procedures define the order in which GCCS platforms should be built, the segments that are required on all GCCS platforms, and the segments that are required for Joint Operational Planning and Execution System (JOPES) and Joint Maritime Command Information System (JMCIS) functionality. Specifically, these procedures address the following:

   a. Installation of the Solaris 2.3 Operating System.

   b. Installation of the GCCS Common Operating Environment (COE) Kernel Version 2.2.

   c. Instructions on building and configuring the Executive Manager server, the key system in all GCCS environments.

   d. The segments that must be loaded and the processes (e.g., auditing and NIS+) that must be activated on all GCCS platforms.

   e. Specific direction on what segments will be loaded on JOPES application servers, JOPES SPARC 5 clients, and Oracle Database servers at JOPES Core database sites.

   f.   Specific direction on what segments will be loaded on JMCIS platforms.

   g. Instructions on building, configuring, and using the character based interface.

   h. Instructions on building, configuring, and using remote access platforms.

   i   Instructions on setting up NEWS and Internet Relay Chatter (IRC) servers and clients.

   j. Instructions on upgrading GCCS Version 2.1 systems to GCCS Version 2.2.

1.2   Overview

Major changes have been introduced with the release of this version of the Implementation Procedures.   Significant effort has been expended to maximize the performance of the GCCS JOPES applications and maximize the amount of disk space available for applications. The

findings from this effort have been integrated into this document and into the new GCCS COE Kernel, version 2.2. The applicable portions of release bulletins OT.1 through OT.2 have also been integrated into the document.

The latest release of the GCCS COE Kernel (Version 2.2) significantly simplifies the installation process:

- Fifteen identical questions are asked.
- The *kernel_config* file, created during the installation of the first system, automates the installation of all remaining platforms.
- "End User Support" is now specified when loading Solaris 2.3 operating system, except on SPARC 1000/2000 servers.
- Amount of swap space on the application and database servers has ben reduced significantly.
- Simplified disk partition maps have been developed to maximize the amount of disk space available for installation of applications.

The GCCS COE Kernel (Version 2.2) has been designed to upgrade GCCS Version 2.1 systems automatically. In addition to updating the Solaris 2.3 patches, all changes required to support the new GCCS COE and Unified Build (UB) are done.

Section 2, GCCS Architecture and Installation Planning, briefly defines the key points about the GCCS architecture and the specific issues that must be addressed when planning the installation.

Section 3, Installing the Solaris 2.3 Operating System, provides step-by-step instructions on installing the Solaris 2.3 operating system and provides the disk partition maps required.

Section 4, Installing and Configuring GCCS COE Kernel Version 2.2, provides step-by-step instructions on installing the GCCS COE Kernel.

Section 5, Installing SUN Software Packages, provides instructions for installing SUN software packages, e.g SPARCprinterE, Answerbook, and configuring the SUN SPARCstorage Array(s) Volume Manager software. Each of these packages has now been provided as a segment.

Section 6, Configuring the Executive Manager (EM) Server, provides detailed instructions for loading and configuring and installing Sybase, EM and NIS+ servers, User Account Groups Kernel Network Installer, and Update_for_Groups scripts. The EM server must be built and initialized first.

Section 7, Building the GCCS Core System, provides direction/instructions on what must be

loaded and what configuring must be done on all GCCS SUN SPARCstation platforms. This section defines the minimum acceptable GCCS SUN SPARCstation platform and initializing NIS+ Client.

Section 8, Building JOPES Application Server, defines what applications are required and allowed on a JOPES application server. This is the only configuration that will be supported by the GCCS program.

Section 9, Building JOPES SPARC Client, defines what applications are required and allowed on a JOPES SPARC 5 client. This is the only configuration that will be supported by the GCCS program.

Section 10, Building Oracle Database Server, provides instructions for building the Oracle database server at a JOPES Core Database site. It specifically identifies what application database segments and which applications shall be on the Oracle database server.

Section 11, Building Unified Build SUN Platform, provides instructions on building and configuring JMCIS on a SUN SPARC platform.

Section 12, Teleconferencing Installation Procedures, provides instructions on building and configuring the IRC and NEWS Netsite servers and installing IRC, NEWS Netsite, Netscape, News Make Group, and Mail Service clients on all other platforms. The Teleconferencing segments are an integral part of the JOPES applications, and are identified as such in sections 8 and 9. Unfortunately, the large number of patches and the difficulty in configuring the teleconferencing applications dictates the requirement for a separate section.

Section 13, Building Character Based Server, provides instructions on loading and configuring a character based server.

Section 14, Building Remote Platforms, provides instructions for loading, configuring, and using remote access SUN SPARC platforms.

Section 15, Loading GCCS Mission Applications, provides instructions for loading the non-JOPES mission applications. These applications are optional and may impact the performance of the JOPES applications.

Section 16, Upgrading GCCS 2.1 System to the 2.2 level. The Kernel will also replace the SecAdm and SysAdm account groups. It will remove the old GCCS COE, JMCIS COE, UB Core and GCCS patch segments.

Appendix A, GCCS Segment Release Bulletin Version 2.2, containing all active software segments as of dated document. These release bulletins identify the purpose and function of the segment, the requirements of the segment and the dialog that is output by the segments.

Appendix B, Acronyms, defines the major GCCS acronyms.

Appendix C, GCCS Segment Spreadsheet, is a spreadsheet containing all active GCCS segments. It is provided to enable you to keep track of what is installed on each of a site's platforms.

Appendix D, GCCS Version 2.2 Approved Patch List.

Appendix E, GCCS Version 2.2 Solaris Tape-Build Segment List.

The following typographical conventions are used in descriptive and procedural information in this document:

Italics	File names, directories, scripts, user IDs, document names, extension names, and other non-standard terms.
Bold	Character to be typed, pressed or selected in executable and instructions. (Also used for section and subsection headings)
Courier	Courier New 10 pt. is used to denote material presented as it would appear on-screen.
< >	Indicate keys to be pressed by user.
[ ]	Indicate correct user responses in dialogs as it appears on the screen.
☐	Displays screen information for users to view and respond.
	NOTE: Information provided prior to proceeding procedures.